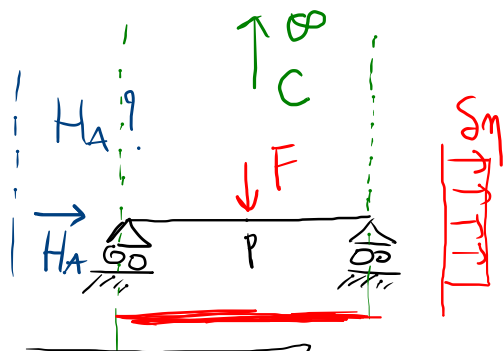


19/12/22
1371N



- 1) ELIMINO VINCOLO
'BUALE' ALL'INCOGNITA
- 2) CERCO C_E ASSEGNO
UNA ROTOTRASL. 2.
- 3) IMPIANGO $\delta L = 0 \quad \forall \delta q$



$$\delta L = 0, \quad \forall \delta \eta$$

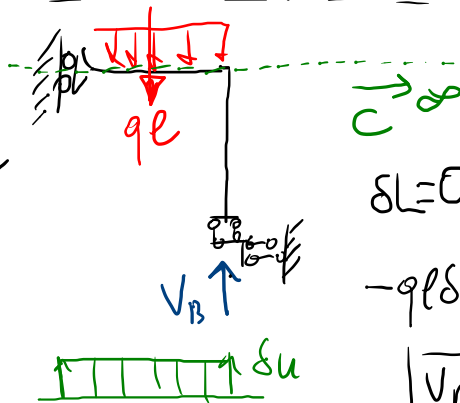
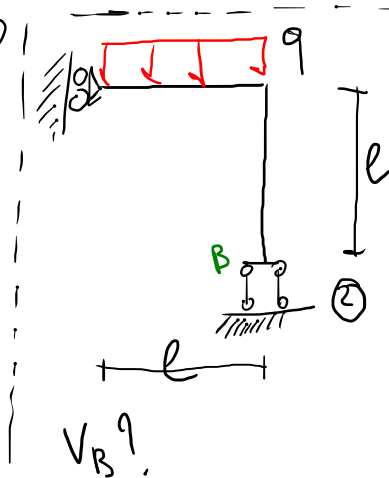
$$H_A \delta \eta = 0 \quad \delta \eta$$

$H_A = 0$

VSC

$$\underbrace{\left(\frac{F\ell}{2} - ve \right)}_{=0} \delta\varphi = 0 \quad \forall \delta\varphi$$

$$V_A = +\frac{F}{2}$$

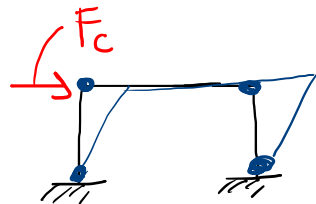


$$\delta L = 0, \forall \delta u \Rightarrow V_B$$

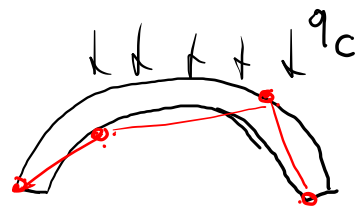
$$-q\ell\delta u + V_B\delta u = 0 \quad \forall \delta u$$

$$\boxed{V_B = 9\text{e}}$$

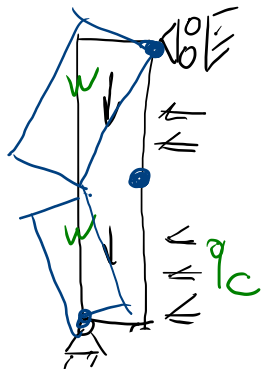
APPLICAZIONI P.L.V. SOGNI RIGIDI



F_c : CARICO DI
COLLASSO DI
UNTERO
(IN REGIME
ELASTOPlastico)



COLLASSO
ARCHI IN MURATURA



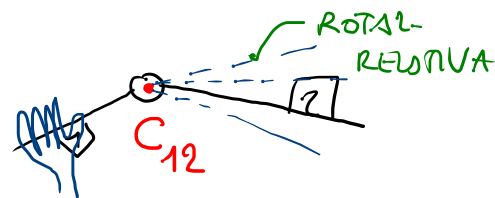
COLLASSO
DEI
MASCHI
MURARI

ESTENSIONE A "STRUTTURE ARTICOLATE"

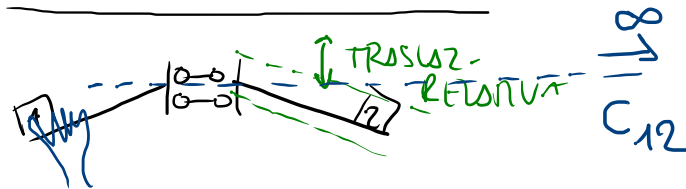
C.I.R. PER I VINCOLI INTERNI.

↳ C.I.R. RELATIVO.

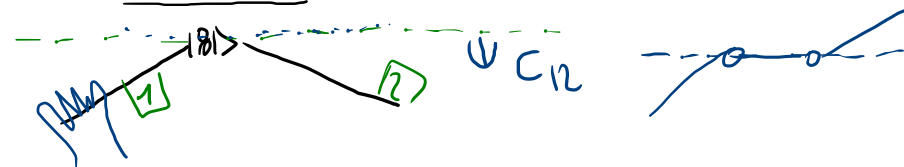
$v=2$: CERNIERA INTERNA

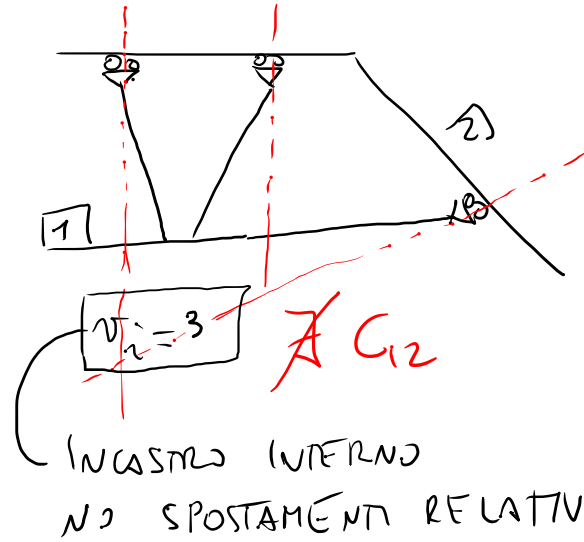
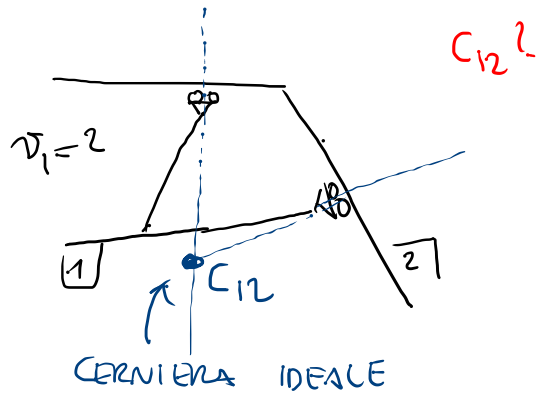


DOPPIO PENNINO INTERNO



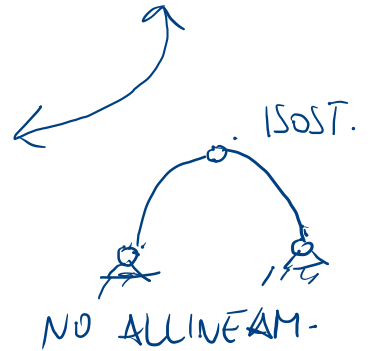
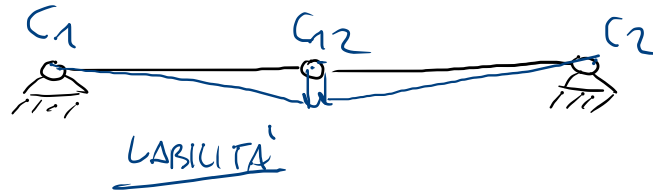
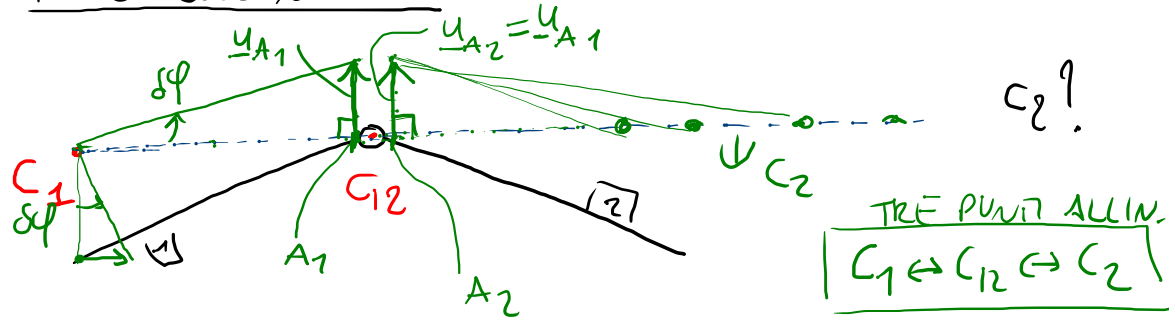
$v=1$: CARRELLO (PENNINO, BIELLA)

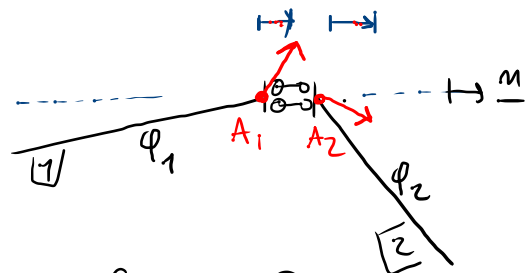




I TEOREMA DELLE OTENE CINEMATICHE (CINEMATISMO CON PIÙ C.R.)

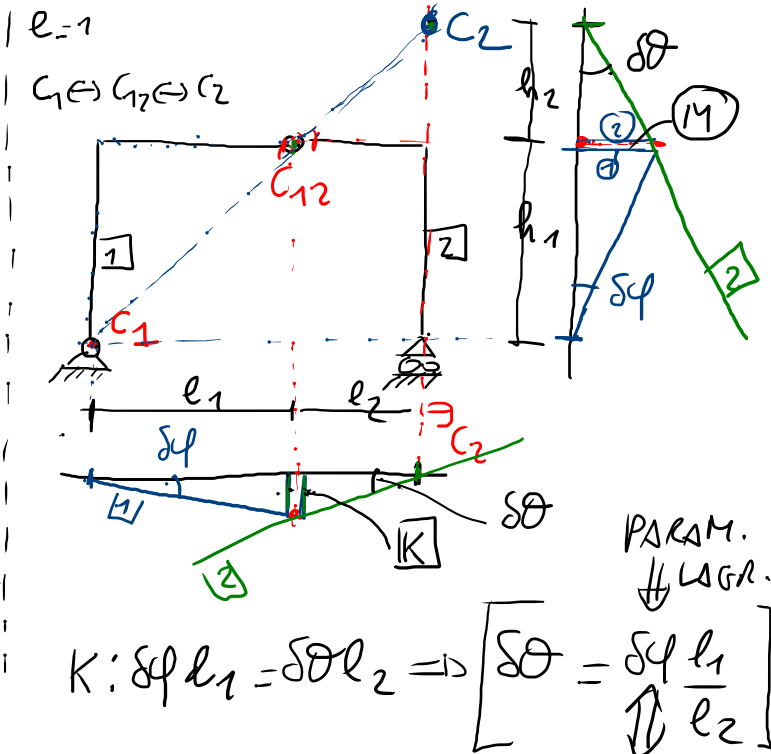
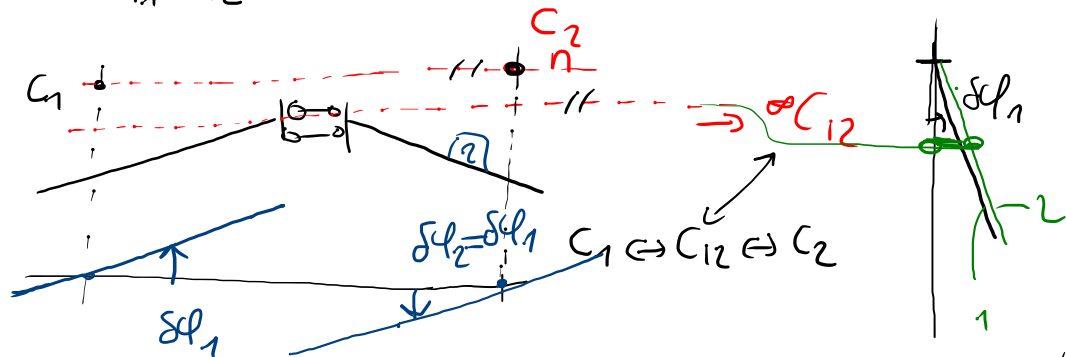
C. Newton affinché avvenga un moto relativo tra 2 C.R. vincolati tra loro è che i centri assoluti e quello relativo siano allineati





$$\infty C_{12}$$

$$\begin{cases} \Delta u \cdot m = 0 \\ \phi_1 = \phi_2 \end{cases}$$



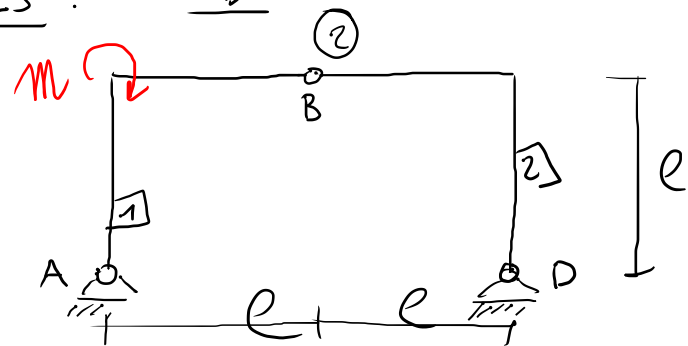
$$K: \delta \phi l_1 = \delta \theta l_2 \Rightarrow \left[\delta \theta = \delta \phi \frac{l_1}{l_2} \right]$$

$$M: \delta \phi h_1 = \delta \theta h_2 \Rightarrow \delta \theta = \delta \phi \frac{h_1}{h_2}$$

$$\frac{l_1}{h_1} = \frac{l_2}{h_2} \quad \left| \quad \frac{h_2}{h_1} = \frac{l_2}{l_1} \right|$$

PARAM. ∇ LOGR.

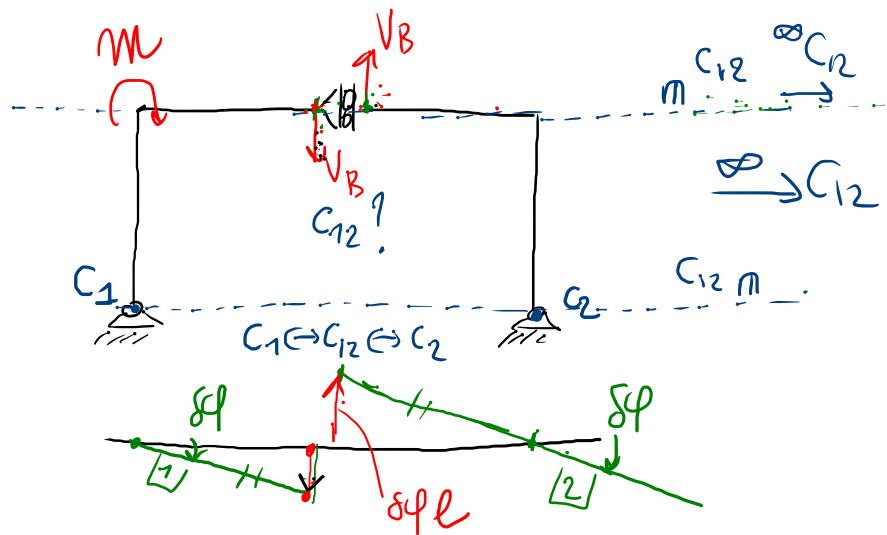
ES $\frac{15057}{V_B?$



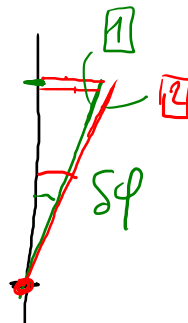
$$SL=0, \forall \delta\varphi \Rightarrow \Delta V_B$$

$$+M\delta\varphi + V_B\delta\varphi e + V_B\delta\varphi e = 0 \quad \forall \delta\varphi$$

$$M + 2V_B e = 0 \Rightarrow \boxed{V_B = -\frac{M}{2e}}$$



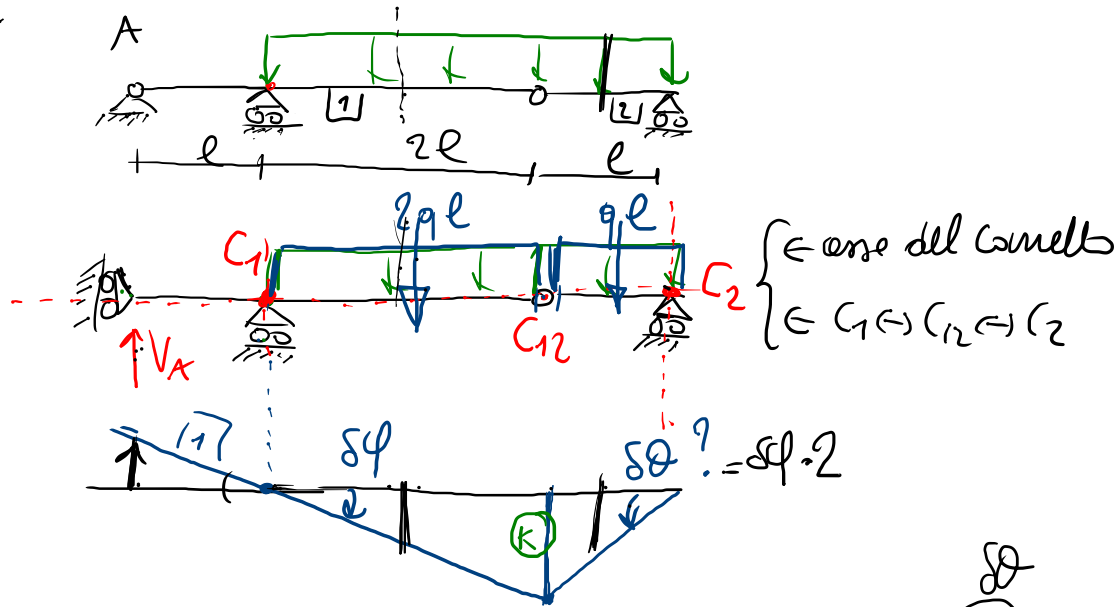
$$\frac{M}{2e}$$



$$H_B?, H_D? \dots$$

LES.

$V_A?$



$$K: \delta\phi 2l = \delta\theta l$$

$$\delta\theta = \delta\phi \cdot 2$$

$$\delta L = 0, \forall \delta\phi \Rightarrow V_A$$

$$\rightarrow V_A \delta\phi l + 2ql \cdot \delta\phi l + ql \cdot 2\delta\phi \frac{l}{2} = 0, \forall \delta\phi$$

$$V_A l + 2ql^2 + ql^2 = 0 \Rightarrow \boxed{V_A = -3ql}$$

$$\downarrow 3ql$$